

### CLAIMS

Claim 1 (Original): A method for determining a human's capacity to metabolize a substrate of a CYP2D6 enzyme, said method comprising the steps of:

a) isolating single stranded nucleic acids from the human, said nucleic acids encoding 5' flanking regions of CYP2D6 genes present on each homologous chromosome 22 of the human, wherein said region is represented by a sequence as set forth in SEQ ID NO:2; and

b) detecting at least three polymorphisms within the region, wherein the polymorphisms are selected from the group consisting of nucleotides present at polymorphic sites represented by positions 36, 194, and 942 of SEQ ID NO:2; nucleotides present at polymorphic sites represented by positions 36, 620, and 942 of SEQ ID NO:2; nucleotides present at polymorphic sites represented by positions 36, 194, and 880 of SEQ ID NO:2; nucleotides at polymorphic sites represented by positions 36, 620, and 880 of SEQ ID NO:2; nucleotides at polymorphic sites represented by positions 36, 194, 620, and 880 of SEQ ID NO:2; nucleotides at polymorphic sites represented by positions 36, 194, 620, and 942 of SEQ ID NO:2; nucleotides at polymorphic sites represented by positions 36, 620, 880, and 942 of SEQ ID NO:2; and nucleotides at polymorphic sites represented by positions 36, 194, 620, 880, and 942 of SEQ ID NO:2.

Claim 9 (Previously added): The method of claim 1, wherein nucleotides at the polymorphic sites represented by positions 36, 194, and 942 of SEQ ID NO:2 are detected.

Claim 10 (Previously added): The method of claim 1, wherein nucleotides at the polymorphic sites represented by positions 36, 620 and 942 of SEQ ID NO:2 are detected.

Claim 11 (Previously added): The method of claim 1, wherein nucleotides at the polymorphic sites represented by positions 36, 194 and 880 of SEQ ID NO:2 are detected.

Claim 12 (Previously added): The method of claim 1, wherein nucleotides at the polymorphic sites represented by positions 36, 620 and 880 of SEQ ID NO:2 are detected.

Claim 13 (Previously added): The method of claim 1, wherein nucleotides at the polymorphic sites represented by positions 36, 194, 620 and 880 of SEQ ID NO:2 are detected.

Claim 14 (Previously added): The method of claim 1, wherein nucleotides at the polymorphic sites represented by positions 36, 194, 620 and 942 of SEQ ID NO:2 are detected.

Claim 15 (Previously added): The method of claim 1, wherein nucleotides at the polymorphic sites represented by positions 36, 620, 880 and 942 of SEQ ID NO:2 are detected.

Claim 16 (Previously added): The method of claim 1, wherein nucleotides at the polymorphic sites represented by positions 36, 194, 620, 880 and 942 of SEQ ID NO:2 are detected.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 532592001900.

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